

REMARKS/ARGUMENTS

Claims 1-2, 4-9, 11-14 and 16-17 are pending in the present application. Claims 3, 10 and 15 are canceled; claims 1, 6, 8 and 13 are amended. Reconsideration of the claims is respectfully requested.

Amendments were made to the specification to correct errors and to clarify the specification. No new matter has been added by any of the amendments to the specification.

I. Interview Summary

Applicants thank Examiner Thuy Dao for the courtesies extended to Applicants' representative during the January 16, 2007 telephone interview. During the interview, Applicants' representative discussed the distinction between the features of claim 1 and the *Fawcett* reference. The Examiner agreed that the reference does not teach at least the detecting, discovering, and sending steps of claim 1. The distinctions between claim 1 and the reference, as discussed during the interview, are described in detail in this response. No agreement as to the allowability of the claims was reached during the telephone interview.

II. 35 U.S.C. § 101

The Examiner has rejected claims 8-17 under 35 U.S.C. § 101 as being directed towards non-statutory subject matter. This rejection is respectfully traversed. The Examiner states:

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 8-12:

Claim 8 is directed to a system comprising "detecting means, discovering means, creating means, and sending means". However, all these means can be reasonably interpreted as being program alone. Program is functional descriptive material and therefore non-statutory, absent being claimed in combination with the necessary hardware to enable the software to act as a computer component and realize its functionality.

Claims 9-12 do not add any additional structure to Claim 8 from which they all depend and are therefore rejected for the same reason.

Claims 13-17:

Claims 13-17 are directed to "a computer program product in a computer readable medium". According to Applicant's specification the computer readable medium may include electromagnetic signals. Electromagnetic signals, which are a form of energy, do not fall within a statutory category.

Office Action dated October 23, 2006, pp. 2-3.

II.A. Claims 8-12

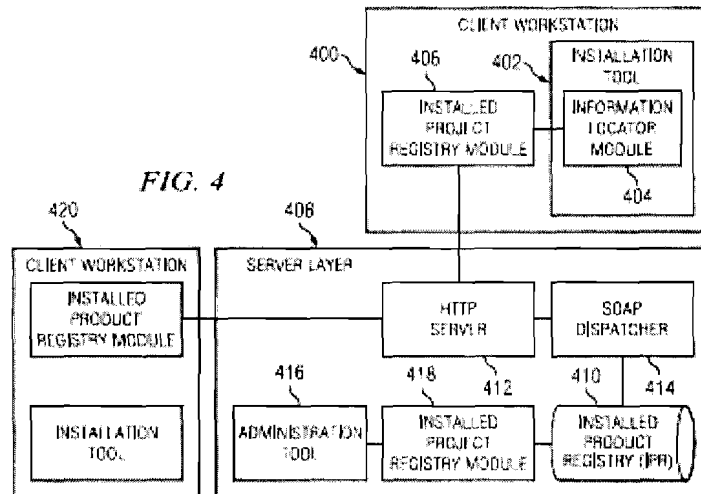
Contrary to the Examiner's assertions, claims 8-12 comply with the standards presented in the MPEP and as required by *State Street Bank & Trust Co. v. Signature Financial Group*, 149 F.3d 1368 (Fed. Cir. 1998), *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994), and *In re Warmerdam*, 3 F.3d 1354, 31 U.S.P.Q.2d 1754 (Fed. Cir. 1994). For example, claim 8 is as follows:

A data processing system for installing software in a network data processing system, the data processing system comprising:
detecting means for detecting an event in the network data processing system, wherein the event indicates that a software module is to be installed in a set of data processing systems in the network data processing system, wherein the set of data processing systems is at least one data processing system;
discovering means for discovering a configuration of each data processing system in the set of data processing systems;
creating means for creating a set of instructions using a knowledge base of prior installations, wherein the set of instructions is tailored for each data processing system in the set of data processing systems based on the configuration for the each data processing system in the set of data processing systems; and
sending means for sending the set of instructions for the software module to be installed to the set of data processing systems.

Claim 8 is directed to a data processing system for installing software in a network data processing system. The data processing system includes the means for a detecting function, means for a discovering function, means for a creating function, and means for a sending function. The sixth paragraph of 35 U.S.C. § 112 states:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Claim 8 is an example of a claim that recites elements of a data processing system in terms of the functions performed instead of the structure of the element. The specification provides the necessary structure for supporting the recited functions as the sixth paragraph of 35 U.S.C. § 112 requires.



Specification, Figure 4.

Figure 4 is a block diagram illustrating an exemplary configuration of hardware and software components of the invention of claim 8. In addition to Figure 4 and Figure 4's description, the specification specifically provides, "The autonomic event engine detects the event generated by the administrator (step 602)", and "The autonomic event engine consists of a repository or knowledge base also referred to as an installed product registry (IPR)". *Specification*, page 17, lines 2-4; page 11, lines 26-28. The installed product registry (IPR) is shown in Figure 4 above as reference numeral 410 residing in server layer 408. The specification further provides, "server layer 408 may be implemented in a server such as server 104 in Figure 1". *Specification*, page 14, lines 19-20. Accordingly, the specification supports the functions recited in claim 8 with the necessary structure. For example, the autonomic event engine component located in server hardware detects an administrator event and checks the IPR located in the server hardware. Thus, the structural means for the detecting function is provided in the specification.

Similarly, the specification provides, "the present invention uses IPR module 406 to discover and communicate with a local or remote IPR", and "The IPR module 406 is a client-server bridge layer". *Specification*, page 14, lines 16-18; page 14, line 7. The specification further provides, "Installation tool 402 resides on client workstation 400 and may be used in an illustrative embodiment of the present invention to facilitate installation of software product from the client", and "a client workstation 400, may be implemented by using the data processing system described in 300 in Figure 3". *Specification*, page 13, lines 17-20, 13-15. Accordingly, the IPR module 406 on client hardware 400 provides the structural means for the discovering function.

Furthermore, the specification provides, "Next, a response file is created by the IPR, which includes a combination of installation information of the new employee and the other employee whose installation information is stored by the IPR for future installs (step 614)". *Specification*, page 17, lines 25-29. This section of the specification provides that the IPR, which has been shown to be a sufficient

structure embodied in the server hardware 408 above, performs the creating function. Thus, the specification provides the necessary structure for the creating function.

As to the sending function, the specification provides, “The scheduler of the autonomic event engine then schedules a push of the required software products to the new employee’s workstation (step 608)”. *Specification*, page 17, lines 16-19. Again, a component of the autonomic event engine residing on server hardware 400 performs the sending function. Thus, the specification provides the necessary structure for the sending function.

Therefore, additional recitation of hardware within which the invention runs is not required to be included within the body of claim 8. Consequently, claims 8-12 satisfy the requirements of the sixth paragraph of 35 U.S.C. § 112 and claim statutory subject matter under 35 U.S.C. § 101.

II.B. Claims 13-17

The Examiner has rejected claims 13-17 under 35 U.S.C. § 101 for alleged non-statutory subject matter provided in the specification. The specification provides:

It is important to note that while the present invention has been described in the context of a fully functioning data processing system, those of ordinary skill in the art will appreciate that the processes of the present invention are capable of being distributed in the form of a computer readable medium of instructions and a variety of forms and that the present invention applies equally regardless of the particular type of signal bearing media actually used to carry out the distribution. Examples of computer readable media include recordable-type media, such as a floppy disk, a hard disk drive, a RAM, CD-ROMs, DVD-ROMs, and transmission-type media, such as digital and analog communications links, wired or wireless communications links using transmission forms, such as, for example, radio frequency and light wave transmissions. The computer readable media may take the form of coded formats that are decoded for actual use in a particular data processing system.

Specification, p. 23, ll. 8-26.

The cited section of the specification describes a variety of computer readable media that can be used for distributing the described invention. Such media, as described in the specification above, is statutory subject matter patentable under 35 U.S.C. § 101.

The USPTO Guideline for evaluating computer-readable medium encoded with functional descriptive material, such as a computer program, expressly states that a claim to such computer-readable medium when so encoded is statutory subject matter. USPTO, *Interim Guideline for Examination of Patent Application for Patent Subject Matter Eligibility* (26 Oct. 2005) (hereinafter “The Guideline”). The Guideline provides, in relevant part:

“[A] claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure’s functionality to be realized, and is thus statutory.”

Id., p. 52.

The Guideline further provides:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O’Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in § 101.

...

These interim guidelines propose that such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of § 101. Public comment is sought for further evaluation of this question.

Id., pp. 55-56.

As The Guideline provides, “a computer readable medium with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure’s functionality to be realized”, is statutory. Under the Examiner’s interpretation, claims 13-17 still describe functional interrelationships between the data structure and the computer software and hardware components, which permit the data structure’s functionality to be realized. Thus, claims 13-17 contain patentable subject matter under 35 U.S.C. § 101, as explained under The Guideline.

The computer readable media described on page 23 of the specification includes media in which a signal is embedded. Therefore, claims 13-17 claim functional descriptive material encoded on a computer readable medium, and do not claim signals encoded with functional descriptive material. For this additional reason, claims 13-17 fall under allowable statutory matter under 35 U.S.C. § 101. This reasoning is fully supported by the specification as quoted above.

The specification and claims 13-17 are statutory subject matter because the claims are interpreted to include the medium, and not to the radio frequency or the light wave signals that may inherently be used in such media technologies. The use of radio frequency or light wave signals as a method of encoding or recording the computer program onto such medium does not render the medium itself non-statutory. Even in the case of a CD-ROM, a laser form of light waves are used for accomplishing the encoding/recording of the information onto the CD-ROM, yet the CD-ROM remains a well-accepted computer readable medium. Encoding an air or glass fiber medium with radio frequency or light wave signals similarly cannot render the air or glass fiber medium non-statutory under 35 U.S.C. § 101.

Thus, based on the MPEP, The Guideline, and applicable case law, claims 13-17 are statutory under 35 U.S.C. § 101. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 8-17 under 35 U.S.C. § 101.

III. 35 U.S.C. § 102, Anticipation

The Examiner has rejected claims 1-17 under 35 U.S.C. § 102(b) as being anticipated by *Fawcett*, Method and System for Identifying and Obtaining Computer Software from a Remote Computer, U.S. Patent No. 6,327,617 B1 (issued, December 4, 2001) (hereinafter, "*Fawcett*"). This rejection is respectfully traversed.

The Examiner has rejected these claims stating:

Claim 1:

Fawcett discloses a method in a data processing system for installing software in a network data processing system (Abstract), by:

detecting an event in the network data processing system, where the event indicates that a software module is to be installed in a set of data processing systems in the network data processing system ("a user computer establishes two-way communications with the update software computer", col. 5, lines 45-51);

discovering a configuration of each data processing system in the set of data processing systems ("an inventory of computer software on the user computer is completed", col. 5, lines 45-51);

creating a set of instructions using a knowledge base of prior installations, where the set of instructions is tailored for each data processing system in the set of data processing systems based on the configuration for the each data processing system in the set of data processing systems ("after the comparison, the user computer is sent back a summary of available computer software", col. 5, lines 51-64);

and sending the set of instructions for the software module to be installed to the set of data processing systems ("the user computer is sent back a summary of available computer software", col. 5, lines 51-64).

Office Action dated October 23, 2006, p. 4.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). In this case, each and every feature of the presently claimed invention is not identically shown in the cited reference, arranged as they are in the

claims.

Fawcett does not anticipate claims 1-17 as asserted by the Examiner. Applicants distinguish the reference from the claims using claim 1 as an example. Amended claim 1 recites:

A method in a data processing system for installing software in a network data processing system, the method comprising:
detecting an event in the network data processing system, wherein the event indicates that a software module is to be installed in a set of data processing systems in the network data processing system, wherein the set of data processing systems is at least one data processing system;
discovering a configuration of each data processing system in the set of data processing systems;
creating a set of instructions using a knowledge base of prior installations, wherein the set of instructions is tailored for each data processing system in the set of data processing systems based on the configuration for the each data processing system in the set of data processing systems; and
sending the set of instructions for the software module to be installed to the set of data processing systems.

Specifically, *Fawcett* does not teach the detecting, discovering, and sending steps as recited in claim 1. As to the detecting step, the Examiner cites the following section from *Fawcett* as teaching this step:

After a user computer establishes two-way communications with the update service computer, an inventory of computer software on the user computer is completed without interaction from the user, sent to the update service computer, and compared to database entries on the update service computer. The database entries from the database connected to the update service computer contain information about computer software which is available to a user. After the comparison, the user computer is sent back a summary of available computer software which is displayed for the user

Fawcett, col. 5, ll. 46-56.

In this section, *Fawcett* describes a process whereby, the software on a user's computer can be updated without user interaction. *Fawcett*'s process starts with the user's computer establishing a two-way communication with an update server and sends an inventory of the software installed on the user's computer. The update server compares the inventory of software on the user's computer to an update database on the update server. If updates are found for the software on the user's computer, the update server sends a summary of available updates to the user's computer. This disclosure, however, fails to teach the detecting step as claimed in claim 1.

In this cited description and elsewhere in the disclosure, *Fawcett* never discloses any "event" or detection of the event. Furthermore, nothing that can be considered equivalent of an "event [that] indicates that a software module is to be installed", as recited in claim 1, is found in *Fawcett*. According

to the section in *Fawcett* cited by the Examiner, the user's computer, which needs the software module/update, initiates and establishes a two-way communication. The Examiner incorrectly considers the establishment of the two-way connection to be the event as claimed in claim 1. The establishment of a two-way connection in and of itself is not an indication that a software module is needed because the two-way connection indicates nothing to the update server so as to determine the user's computer's software module requirements. *Fawcett*'s own disclosure teaches that an inventory of software resident on the user's computer is needed for the update server to make that determination.

However, the combination of establishing a connection, completion of an inventory, sending of the inventory, followed by the comparison of the inventory to a database and determination of any required software modules, is not an event, but a series of ordered steps. Detection of an event implies exactly that – detecting an event, not performing a series of steps that may at best form a chain of events, but not a single event indicative of a specific requirement as stated in claim 1. In other words, *Fawcett* teaches generating events at best, not detecting an event as recited in claim 1.

The Examiner further uses the same section of *Fawcett* to erroneously find a teaching corresponding to the discovering step. Claim 1 recites “discovering a configuration of each data processing system”. The discovering step in claim 1 is performed by a “data processing system”, identified differently from the set of data processing systems in a network data processing system, on which the discovery is made. To wit, a first system performs a discovery on a second system. This distinction is identified in the recitation of claim 1 by the use of distinct labels and prefixes for each system.

Now consider the Examiner's statement that *Fawcett*'s teaching “an inventory of computer software on the user computer is completed” teaches the discovery step of claim 1. *Fawcett*'s section quoted above, teaches that the user's computer performs its own inventory and sends the inventory to the update server. Clearly, a teaching that a system performs an inventory of its own software does not teach that a first system performs the inventory on a second system. Accordingly, the Examiner's reliance on *Fawcett*'s teaching is erroneous for finding a teaching of the discovering step as claimed in claim 1.

As to the sending step, the Examiner cites the following from *Fawcett*:

The database entries from the database connected to the update service computer contain information about computer software which is available to a user. After the comparison, the user computer is sent back a summary of available computer software which is displayed for the user. The summary contains information such as the availability of patches and fixes for existing computer software, new versions of existing computer software, and brand new computer software, new help files, etc. The user is then able to make one or more choices from the summary of available computer software, and have the computer software transferred from the update service computer to the user computer. The user may choose to update on the fly, or store update information for future update needs.

Fawcett, col. 5, ll. 51-64.

In addition to the description of the previous quoted section from *Fawcett*, *Fawcett* in this section teaches that the update server sends a summary of updates available for the inventory of user's computer's software to the user's computer. Nothing in *Fawcett*'s entire disclosure indicates that this summary is more than a listing of available updates.

In contrast, the sending step in claim 1 expressly provides that the sending step sends "a set of instructions for the software modules to be installed", and not merely a listing of software modules that can be installed. A list of software that can be installed does not teach a set of instructions for software to be installed. This distinction is significant at least because the former, as taught by *Fawcett*, is merely a recommendation, whereas the latter, as claimed, instructs the installation to occur on the data processing systems. Therefore, *Fawcett* fails to teach the sending step as recited in claim 1.

Therefore, for at least the three reasons described above, *Fawcett* fails to anticipate claim 1 under 35 U.S.C. § 102(b). Independent claims 7-8 and 13 contain features similar to those in claim 1 and are also not anticipated by *Fawcett* by similar reasoning.

Claims 2, 4-6, 9, 11-14 and 16-17 are not anticipated by *Fawcett* at least by virtue of their dependence from one of the above independent claims. Furthermore, the dependent claims are not anticipated by *Fawcett* because they contain additional features not taught by *Fawcett*. For example, claim 4 recites:

The method of claim 1, wherein the knowledge base of prior installations is located in an installed product registry.

The Examiner states:

Fawcett discloses the method of claim 1, where the knowledge base of prior installations is located in an installed product registry ("database connected to the update service computer contain information about computer software which is available to a user", col. 5, lines 51-53).

Office Action dated October 23, 2006, p. 5.

Fawcett does not teach "the knowledge base of prior installations is located in an installed product registry", as recited in claim 4. The Examiner cites the following from *Fawcett* as teaching this feature:

The database entries from the database connected to the update service computer contain information about computer software which is available to a user.

Fawcett, col. 5, ll. 51-53.

Here, *Fawcett* only teaches that a database of software is available to a user. Whether the database of available software is a database of prior installations of software, *Fawcett* does not say. Absent a teaching of the feature “the knowledge base of prior installations is located in an installed product registry” exactly as claimed in claim 4, the reference cannot anticipate claim 4. For this additional reason, *Fawcett* does not anticipate claim 4 under 35 U.S.C. § 102(b).

Consequently, the rejection of claims 1-17 under 35 U.S.C. § 102(b) has been overcome.

IV. **Objection to Claims**

The Examiner has objected to claim 3 for failing to further limit claim 1 from which claim 3 depends. In response, claim 3 has been canceled and claim 1 amended to incorporate the features of the canceled claim. Consequently, the objection to claim 3 has been overcome. Claims 10 and 15 contained features similar to claim 3, but the Examiner did not object to those claims. Claims 10 and 15 have also been canceled and claims 8 and 13 have been amended to incorporate the features of the canceled claims respectively.

The Examiner has objected to claim 6 for containing a typographical error. In response, claim 6 has been amended to remove the error.

V. **Conclusion**

It is respectfully urged that the subject application is patentable over *Fawcett* and is now in condition for allowance. The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: January 18, 2007

Respectfully submitted,

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